

SREEKUMAR THAITHARA BALAN

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SUMMARY

- Deep-tech innovator and machine learning systems builder with 8+ years of experience in multi-modal AI, time-series forecasting, and large-scale data infrastructure. Proven track record leading teams, deploying ML in high-stakes environments, and translating research into scalable real-world solutions. PhD in Astrophysics from Cambridge.

TECHNICAL SKILLS

- **Machine Learning:** Python, PyTorch, TensorFlow, XGBoost, HuggingFace
- **MLOps & Cloud:** Spark, GCP, BigQuery, MLFlow, Airflow, FastAPI
- **Data Engineering:** SQL, Pandas, NumPy, ETL Optimization, Data Lakes (30M+ points)
- **Leadership:** OKRs, Stakeholder Communication

PROFESSIONAL EXPERIENCE

PROPORTUNITY (Fintech Mortgage Lender) | Head of Data Science

Apr 2018 - Aug 2024

- Led development of a multi-modal ML platform (tabular, text, imagery) for property price forecasting (~93% accuracy).
- Built a data lake of 14 geospatial/time-series sources (30M+ points), enabling fast prototyping.
- Reduced ETL pipeline costs by 40% (£12k/year savings) via parallelization and bottleneck analysis.
- Authored investor-facing technical report used in £3M Series A raise.
- Scaled DS team to 5; launched OKRs and shipped monthly model upgrades.
- Published PR-driven data stories featured in Time Out & Evening Standard

ALPHA-I (Fintech Hedge Fund) | Co-founder and CTO

Mar 2016 - Feb 2018

- Co-founded AI-powered hedge fund; raised ~\$1M in seed capital.
- Developed Bayesian Deep Learning models for S&P-500 trading (60% accuracy in variance prediction).
- Created a backtesting framework for safe production deployment of strategies every 2 weeks.

UNIVERSITY COLLEGE LONDON | Postdoctoral Research Associate

Jun 2012 - Feb 2017

- Applied Bayesian statistics to cosmological data (20+ peer-reviewed papers).
- Led software development for ESA's Euclid Space Telescope.

EDUCATION

University of Cambridge | PhD in Astrophysics

Oct 2008 - Apr 2012

- Co-discovered 3 exoplanets; awarded Isaac Newton Scholarship (top 2%).

University College London | MSc in Physics (Distinction)

Sep 2006 - Oct 2008

ADDITIONAL INFORMATION

- **Awards:** Kaggle Top 2% (M5 Time Series Competition).
- **Tools:** Notion, Trello, Slack, Google Workspace.